

particular nucleotides of the artificial regulatory sequences where it was expected.

On Figure 7, there are pictures of characteristic beta-galactosidase staining patterns in different parts of the fly  
5 brain resulted from crossing positive gene trap lines with flies harboring a UAS-lacZ construct.

### ~~Industrial Applicability~~

The vector system of this invention offers an  
10 exceptional opportunity for easy and fast cloning of the gene responsible for the observed phenotype. Furthermore, by using the UAS-driven coding sequence of any gene of interest, that particular gene can be expressed in identical patterns than those of the trapped genes and these expressions can be  
15 regulated temporarily at any desired developmental stage.

### Sequence Listing

- <110> Japan Science and Technology Corporation  
<120> A Vector for Gene Trap, and A Method for Gene Trapping  
20 by Using The Vector  
<150> Japan, Application No. 10-141952  
<151> 22 May 1998  
<160> 1  
<170> PatentIn Ver. 2.0  
25 <210> 1  
<211> 11206  
<212> DNA  
<213> Artificial sequence  
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30 <221> 3' P sequence

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<221> synthetic splicing acceptor site and stop/start  
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5 <222> (238) .. (274)  
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<222> (275) .. (3164)  
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<222> (3165) .. (3426)  
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<222> (8300) .. (8446)  
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<221> bacterial part of pCasper3 shuttle vector including  
30 complete pUC8 sequence

<222> (8447) .. (11206)

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5 (3427) .. (3457)

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